

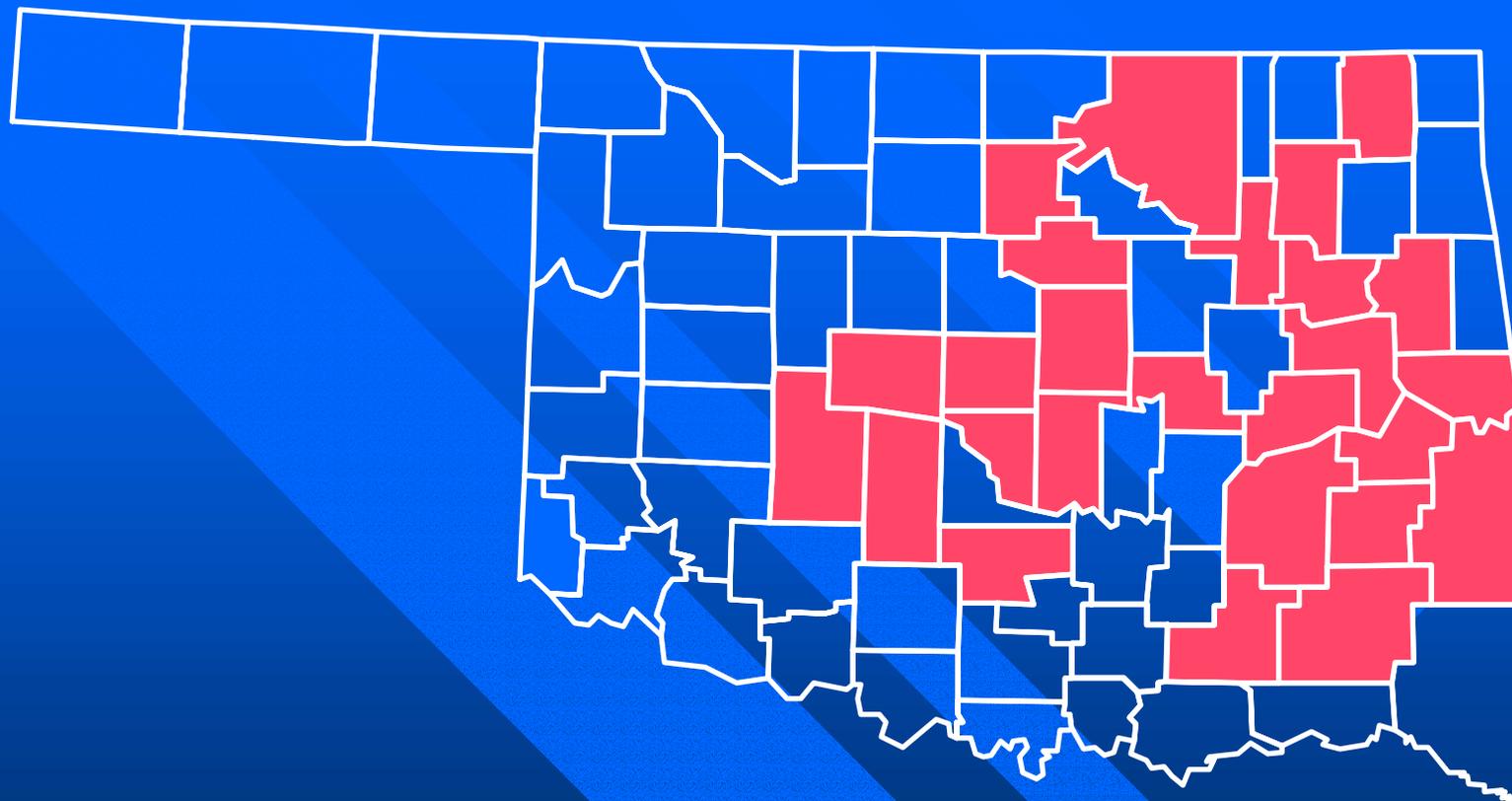
Oklahoma State Report
State Public Health Vector
Control Conference
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Reported Cases* of Tickborne Illness Oklahoma, 2003

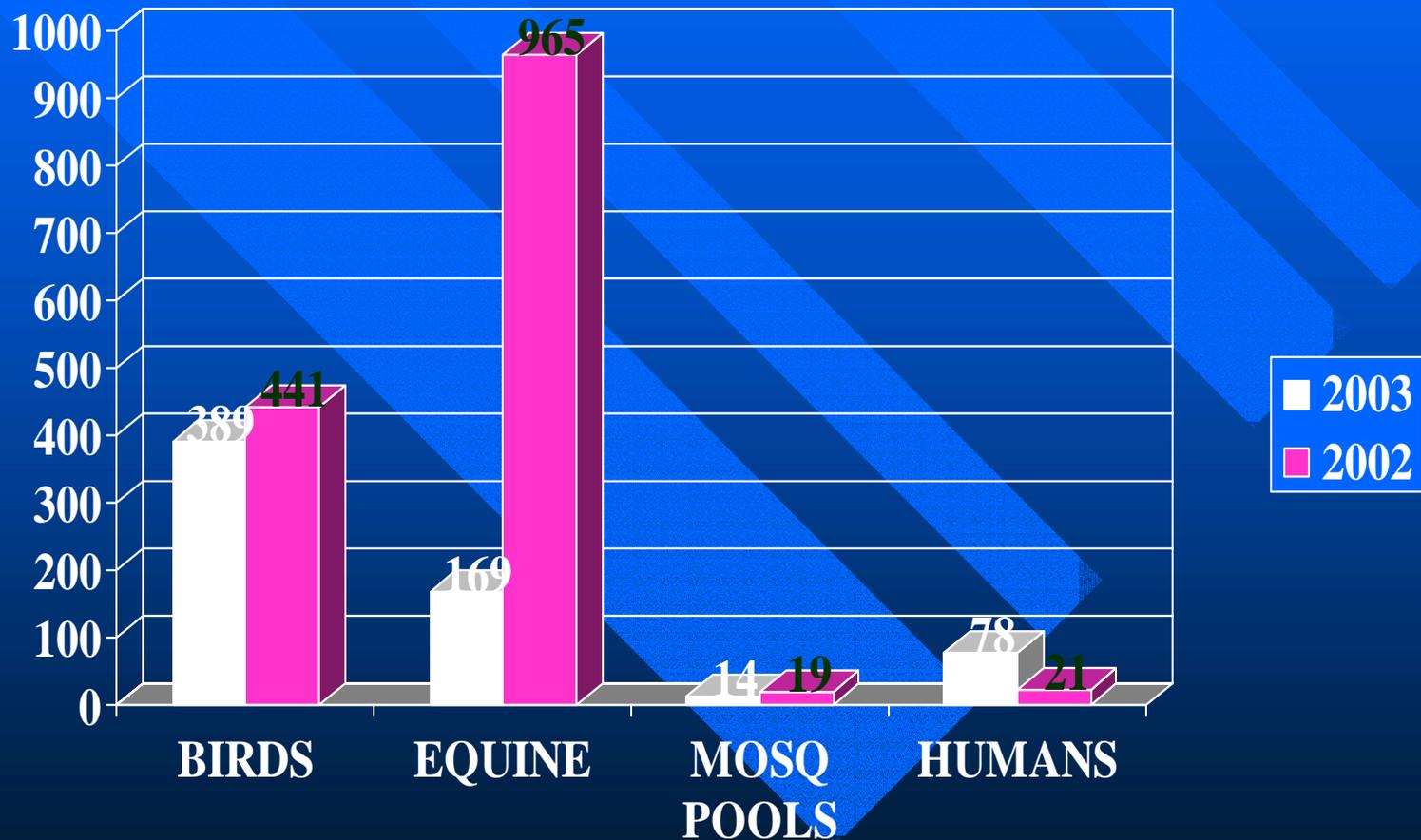
Rocky Mountain Spotted Fever	51 Cases 16 Hospitalized 1 Death
Tularemia	6 Cases 2 Hospitalized 1 Death
Ehrlichiosis (HME)	9 Cases 8 Hospitalized 1 Death

*Preliminary data

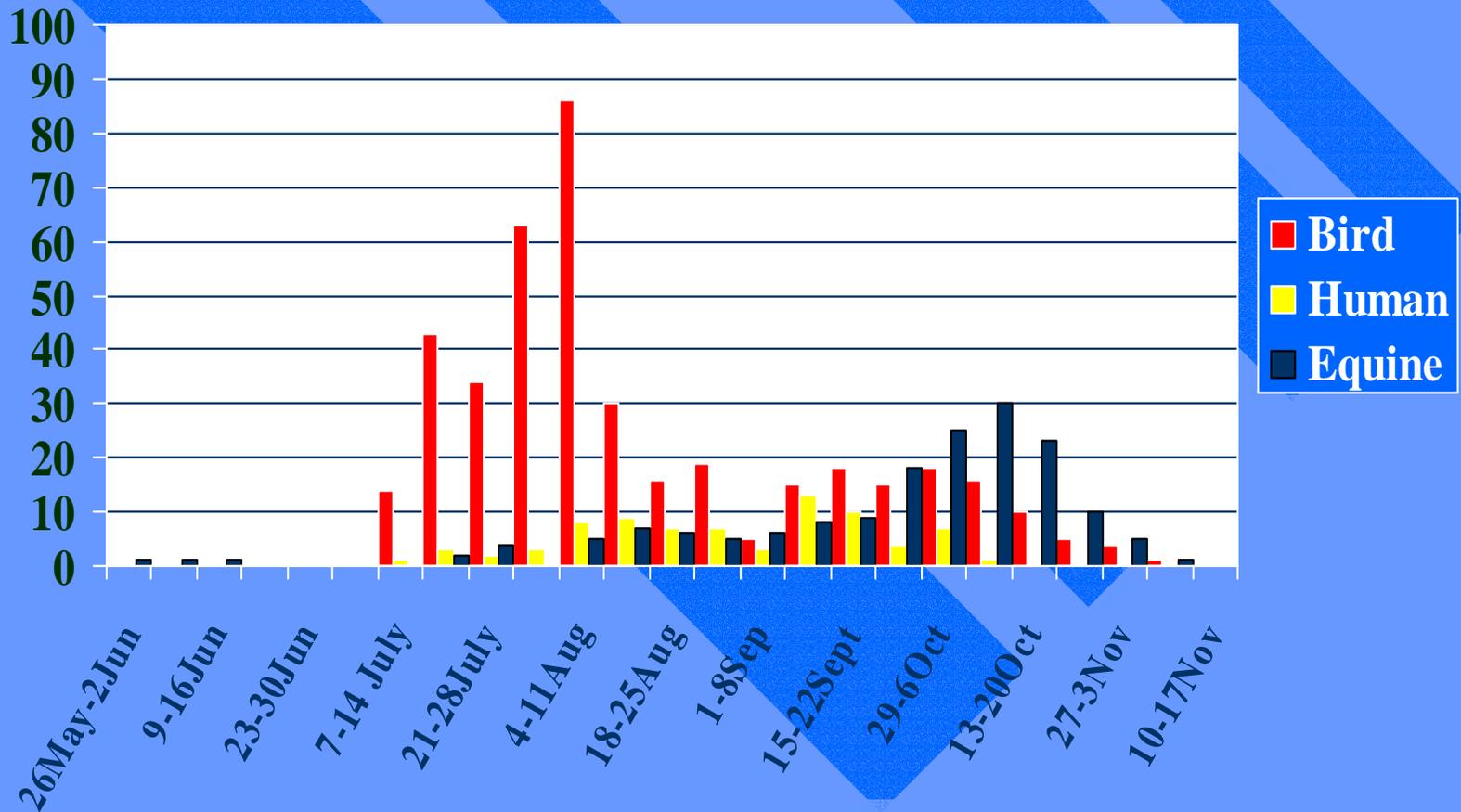


**Distribution of Tickborne Illness by
County of Residence;
Oklahoma 2003**

LABORATORY-CONFIRMED CASES OF WNV INFECTION IN HUMANS, ANIMALS, and MOSQUITO POOLS OKLAHOMA, 2002 vs. 2003



TEMPORAL RELATIONSHIP OF BIRDS(n=389) HUMAN (n=78)AND EQUINE (n=169) WNV INFECTION, OKLAHOMA 2003



2003 Oklahoma WNV Cases: Epidemiology

- 78 Human cases of WNV infection
- 35 (45%) female 44 (55%) male
- Median age = 45 years old; range = 11 - 88 yrs
- 45 (58%) hospitalized; 0 deaths
- Variety of presenting syndromes:
 - 48 meningoencephalitis 2 Paralysis
 - 23 “West Nile Fever”
 - 7 unspecified
 - Dates of onset: July 09 - October 09, 2003

Dead Wild Bird Surveillance; 2003-Oklahoma



- Limited geographic surveillance areas to locales with mosquito control capabilities
- Total of 764 birds tested
- 401 WNV-positive by rt-PCR of organ pool (52.5% positivity)
- 275 (68.5%) blue jays, 109 crows, 8 cardinals, 4 grackles, 2 Eastern bluebirds, 2 hawks, and one unknown type.

Oklahoma Dead Wild Bird Surveillance; 2002 - 2003 Comparison



- Parallel temporal trend
 - First detected WN+ bird collected 2nd week of July; bimodal peak of dead bird positivity (mid-Aug and mid-Sept)
- Sightings/reports of dead blue jays high predictive value in eastern OK
- Limiting testing resources to corvids and birds of prey was effective
- Best overall surveillance indicator of human risk

Equine Surveillance Oklahoma; 2003

- First surveillance event in OK in 2003
- Overall temporal incidence trend similar to previous year
 - >80% cases have onset in Sept & Oct
- Marked decrease in lab-confirmed cases compared to previous year (169 vs 965)
- Foci of transmission in NE corner of state



WN Vectors in Oklahoma

■ *Culex tarsalis*

- most prevalent in the west
- highest WNV vector competency rating
- also transmits SLE and WEE
- egg-adult cycle in 4 – 10 days during hot summer months



□ *Culex pipiens quinquefasciatus*

- “Southern house mosquito”
- Container breeder with great skill in gaining indoor access
- SLE vector



Mosquito Surveillance in Oklahoma; 2003

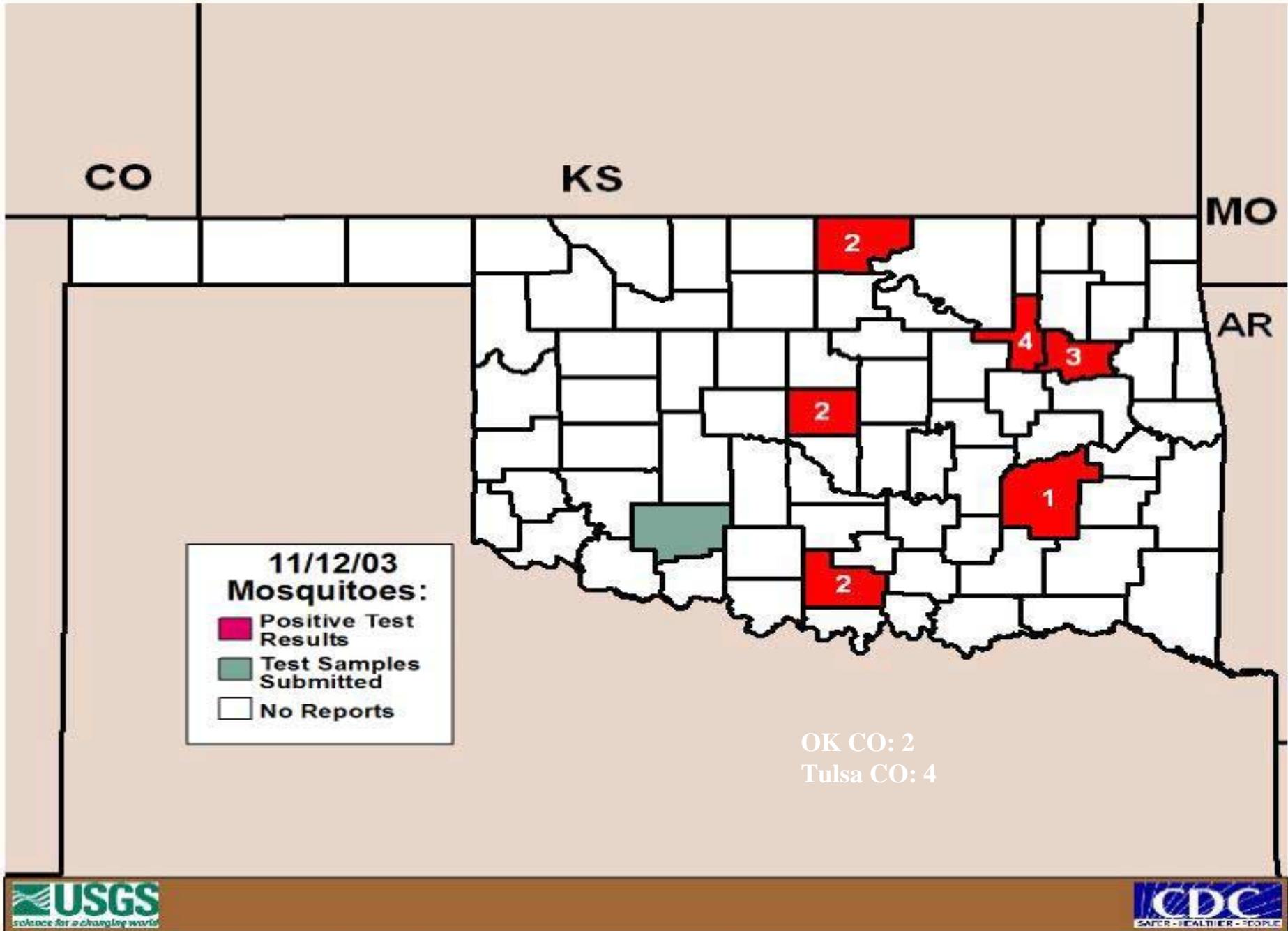
- *Sporadic trapping from July thru October 2003*
- *12 different counties*
- *5,902 adult female mosquitoes of 27 different species collected*
- *New identifications*
 - *Culex coronator in Pittsburg county*
 - *Ochlerotatus muelleri larvae found in ODOT concrete testing tank; 9/23/03*



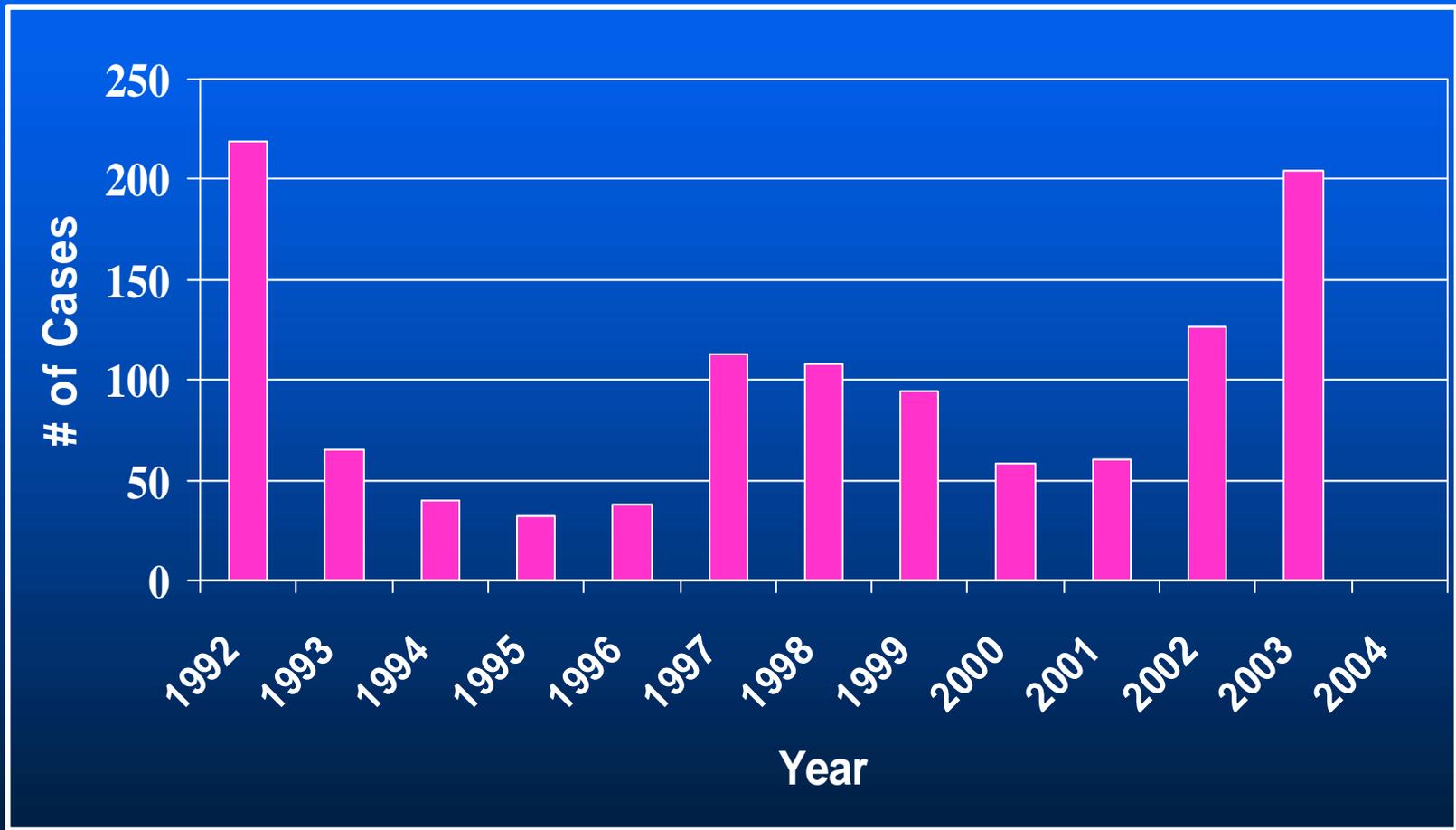
Mosquito Surveillance in Oklahoma; 2003

- *First WN+ pool collected July 17*
- *14 WN+ pools*
 - *5 C. quinquefasciatus*
 - *1 A. albopictus*
 - *8 C. pipiens/restuans*
- *Labor and resource intensive*
- *Limited # entomological experts in state to sort and ID*
- *Limited surveillance value for West Nile and SLE at this time*



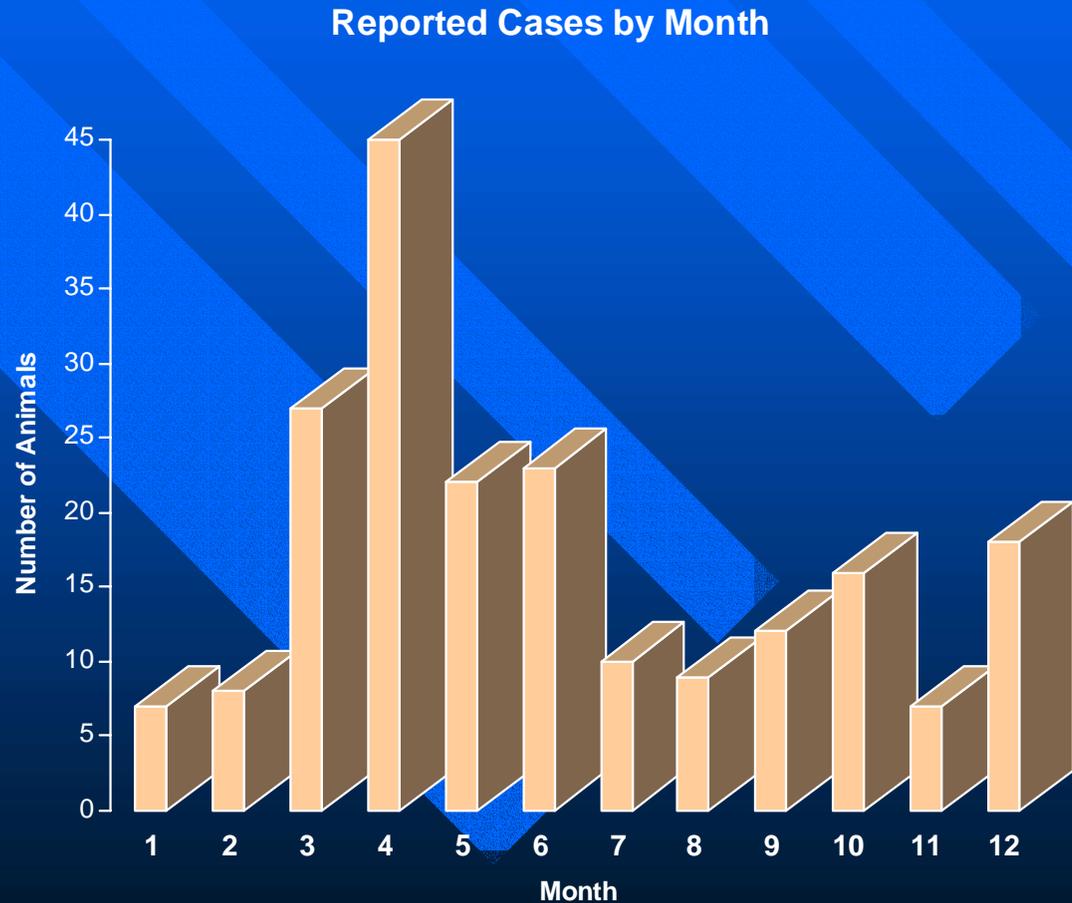


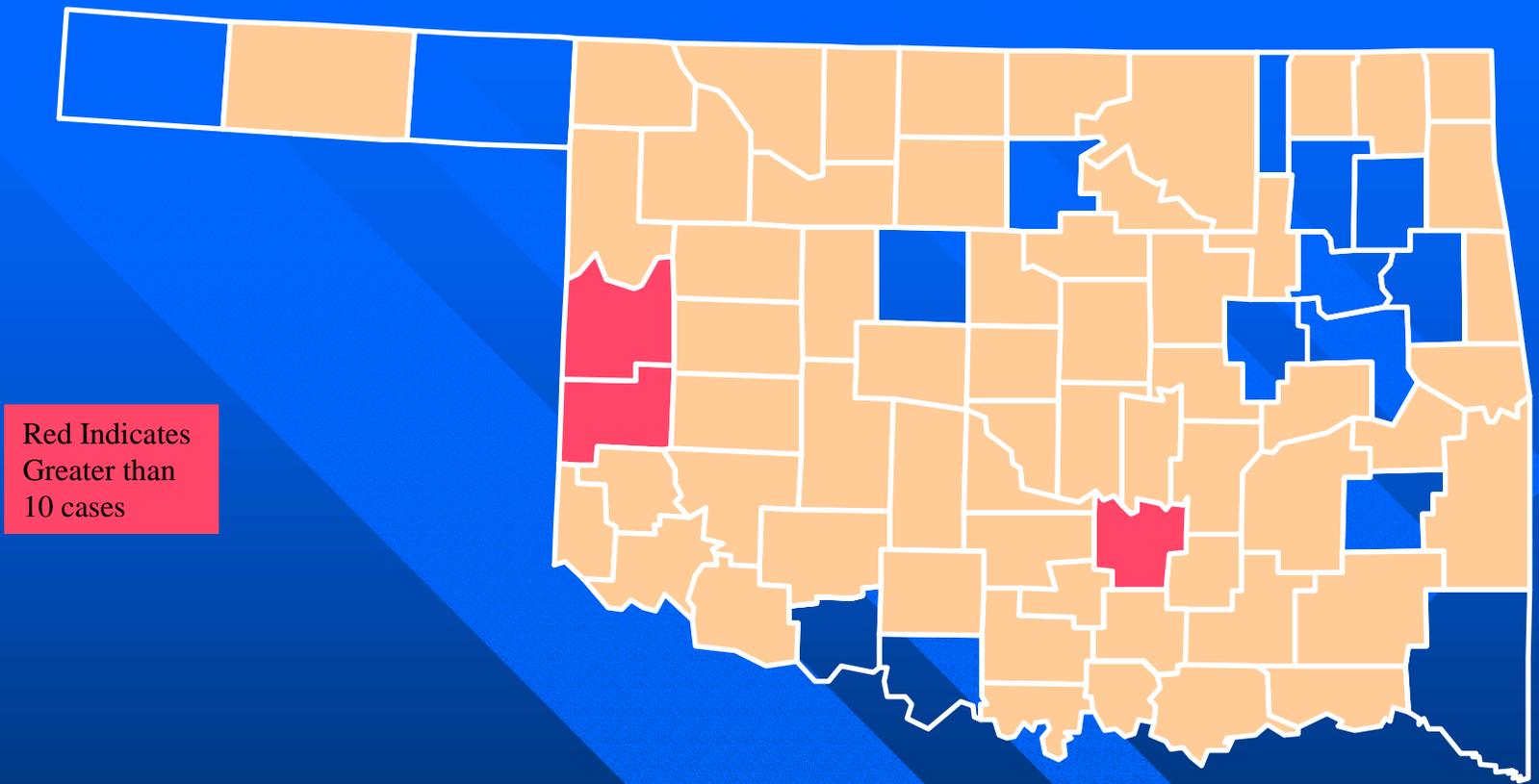
Laboratory-Confirmed Animal Rabies Cases in Oklahoma, 1992-2003



Reported Cases of Animal Rabies; Oklahoma, 2003 (N=204)

Bats-7
Bobcat-1
Cats-9
Cows-16
Dogs-16
Horses-8
Skunks-147





**Distribution of Animal Rabies
Oklahoma 2003**